Kelvinator

Gas Continuous Flow Hot Water System
Installation Manual

Congratulations

Congratulations and thank you for choosing our gas continuous flow hot water system. We are sure you will find your new hot water system a pleasure to use. Before you install the hot water system, we recommend that you read through the entire installation manual, which provides the description of the hot water system, its functions and how to install it correctly. To avoid the risks that are always present when you use an appliance, it is important that the hot water system is installed correctly and that you read the safety instructions carefully to avoid misuse and hazards.

After unpacking the hot water system please check it is not damaged. If in doubt, do not use the hot water system but contact your local Electrolux Customer Care Centre using the number located at the back of this installation guide.

NOTE: The actual gas heating appliance that is part of this gas continuous flow hot water system will here after be refered to as "water heater" for the purposes of this manual. The gas continuous flow hot water system as a whole may also be refered to as "hot water system" for simplicity.

environmental tips

Information on disposal for users

- Most of the packing materials are recyclable. Please dispose of those materials through your local recycling depot or by placing them in appropriate collection containers.
- If you wish to discard this gas continuous hot water system, please contact your local authorities and ask for the correct method of disposal.

caution

- The hot water system is not intended for use by young children or infirm persons without supervision.
- Children should be supervised to ensure that they do not play with the hot water system.
- Contact an authorised installer for installation of this hot water system.
- Contact an authorised service technician for repair or maintenance of this hot water system.
- If the power cord is to be replaced, replacement work must be performed by authorised personnel only.
- Installation work must be performed in accordance with national standards by authorised personnel only. Wrong connection can cause over heating or fire.
- This hot water system should be installed in accordance with AS/NZS 3000 and your electricity suppliers rules.
- The installation of this hot water system must comply with the standards set in AS/NZS 3500.4 - Hot Water Supply Systems.

Conditions of use

This hot water system is intended to be used in household and similar applications such as :

- staff kitchen areas in shops, offices and other working environments.
- farm houses.
- by clients in hotels, motels and other residential type environments.
- bed and breakfast type environments

Contents

Important 3
Important safety instructions 4
For the plumber 5
Dimensions and connection points 6
Installation 8
Clearances 9
Gas connection 10
Water connection 11
Electrical connection 12
Remote controller 13
Remote controller Installation 14
Commissioning Instructions 16
Troubleshooting 18
PCB error codes 19
Warranty 23

Important

This Installation Manual has been prepared for the installers of the gas continuous flow hot water system.

Meanings of symbols used in this manual are shown below:

warning

This symbol indicates information concerning your personal safety

caution

This symbol indicates information on how to avoid damaging the gas continuous flow hot water system.

tips & information

This symbol indicates tips and information about use of the gas continuous flow hot water system.

environmental tips

This symbol indicates tips and information about economical and ecological use of the gas continuous flow hot water system.

For the installer

The installation must be completed in accordance with the information supplied in this Installation Manual.

All other relevant National, State or Local regulations must also be conformed with and these include (but are not limited to):

- Australian Standard AS3500.1 – Water Supply
- Australian Standard AS3500.4 – Hot Water Supply
- Australian Standard AS3000 – Electrical Installation
- Australian Gas Association Code AS5601 – Gas Appliance Installation
- Local Water, Gas & Electrical Authority Regulations Municipal Building Codes

warning

Installation must be performed by a qualified installer (for example, a licensed plumber or gas fitter).

warning

This gas continuous flow hot water system is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience or knowledge, unless they have been given supervision or instruction concerning use by a person responsible for their safety. Children should be supervised to ensure that they do not play with the gas continuous flow hot water system.

This symbol indicates never to do this

This symbol indicates always do this

warning

✓	**Connect with power properly.** Otherwise, it may cause electric shock or fire due to excess heat generation.
✓	**Always ensure effective earthing.** No earthing may cause electric shock.
✓	**Disconnect the power and turn off the gas inlet valve to the water heater if strange sounds, smell, or smoke comes from it.** It may cause fire and electric shock.
⊘	**Do not operate or stop the water heater by switching on or off the power.** It may cause electric shock or fire due to heat generation.
⊘	**Do not damage or use an unspecified power cord.** It may cause electric shock or fire. If the power cord is damaged, it must be replaced by the manufacturer or an authorised service centre or a similarly qualified person in order to avoid a hazard.
⊘	**Do not modify power cord length or share the outlet with other appliances.** It may cause electric shock or fire due to heat generation.
⊘	**Do not operate with wet hands or in damp environment.** It may cause electric shock.
⊘	**Do not allow water to run into electric parts.** It may cause failure of machine or electric shock.
⊘	**Do not use the socket if it is loose or damaged.** It may cause fire and electric shock.
⊘	**Do not open the water heater during operation.** It may cause electric shock.
⊘	**Do not allow the power cord to rest close to hot surfaces.** It may cause fire and electric shock.
⊘	**Do not disassemble or modify the water heater.** It may cause failure and electric shock.

Important safety instructions

Ensure the following safety instructions are read and understood before commencing installation.

⚠ warning

For the continued safety of this appliance it must be installed, operated and maintained in accordance with the manufacturer's instructions.

⚠ warning

If you do not follow these instructions exactly, a fire or explosion may result causing property damage, personal injury or loss of life.

1. The gas continuous flow hot water system does not have a pilot. It is equipped with an internal ignition device that automatically lights the burner. Do not try and light the burner by hand.
2. BEFORE OPERATING use a suitable gas detector to check all around the hot water system for evidence of leaking gas. Be sure to check close to the ground if you are using LP gas as it is heavier than air and may settle on the ground.

   WHAT TO DO IF YOU SMELL GAS.
   - Do not try to light the water heater.
   - Do not touch any electrical switch
   - Do not use any phone in your building
   - Check and isolate the main gas valve
   - Immediately call your gas supplier from a neighbour's phone. Follow the gas supplier's instructions
   - If you cannot reach your gas supplier, call the fire department
3. When turning the gas valve knob, do so only by hand, never use tools. If you can not do this, do not try and repair it.
4. Do not use the water heater if any part has been under water. Immediately call a qualified service technician to inspect the water heater and to replace any damaged parts.

⚠ warning

Vapours from flammable liquids will explode and catch fire causing death or severe burns.

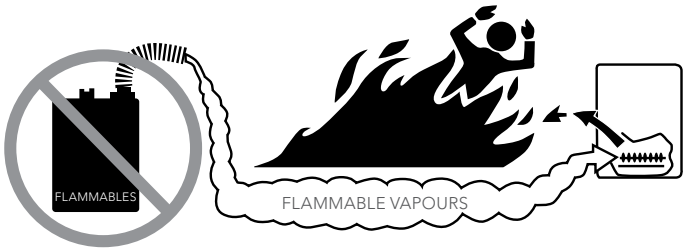
Do not use or store flammable products such as gasoline, solvents or adhesives near the water heater.

Keep flammable products:

1. Far away from the water heater
2. In approved containers
3. Tightly closed
4. Out of children's reach

Vapours:

1. Cannot be seen
2. Vapours are heavier than air
3. Go a long way on the floor
4. Can be carried from other rooms to the main burner by air currents



For the plumber

PLEASE NOTE this water heater is supplied factory set to comply with the requirements of AS 3498.

If you are installing a 60°C or 70°C gas continuous flow hot water system, a tempering valve is to be installed for the hot water supplying sanitary fixtures primarily used for the purpose of personal hygiene.

Please follow all the installation instructions in this manual including the following instructions regarding the water heater outlet connection:

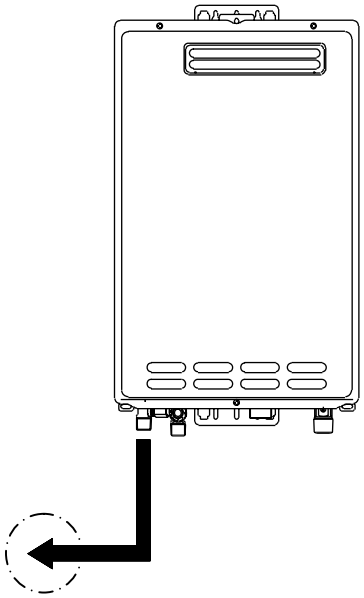
1. When connecting the hot water supply to the fixtures in the property, a minimum of three (3) metres of pipework must be used between the outlet of the water heater and the first tap or outlet. If you are installing a 60°C or 70°C model, only a minimum of one (1) meter of pipework is necessary. See diagram to the right.
2. The hot water outlet line from the water heater should be covered with 20mm pipe insulation or similar to prevent heat loss and persons coming in contact with it.
3. When the installation is completed, the temperature of the hot water supplying sanitary fixtures primarily used for the purpose of personal hygiene, for example the bathroom shower/taps, shall be checked to ensure it does not exceed 50°C. If a 50°C model gas continuous flow hot water system has been installed, all hot water taps and fixtures need to be checked to ensure they do not exceed 50°C.

MODELS	KGC20BNA KGC20KNA KGC20SNA KGC20BLA KGC20KLA KGC20SLA	KGC26BNA KGC26KNA KGC26SNA KGC26BLA KGC26KLA KGC26SLA
Capacity L/min	20L/min	26L/min
Gas Input MJ/h	160	195
Supply Inlet Pressure kPa – Nat. Gas	1.13 min.	1.13 min.
	2.75 max.	2.75 max.
Supply Inlet Pressure kPa - LPG	2.61 min	2.61 min
	2.89 max	2.89 max
Water Supply Pressure kPa	150* min	150* min.
	1200 max	1200 max
Height mm	542	542
Depth mm	170	215
Width mm	350	350
Weight kg	15.7	17.2
Gas Connection mm	20 BSP	20 BSP
Water Connections	15 BSP	15 BSP
Ignition	Electronic	Electronic
Electrical Supply Voltage	240 AC	240 AC
Operating current	0.8A	0.8A

*The water heater will operate at reduced performance if inlet water supply pressure is below 340 kPa.

Note: If the gas supply pressure exceeds the maximum value in the above table for the respective gas type, fit an appropriate pressure limiting valve at the inlet to the gas inlet of the water heater.

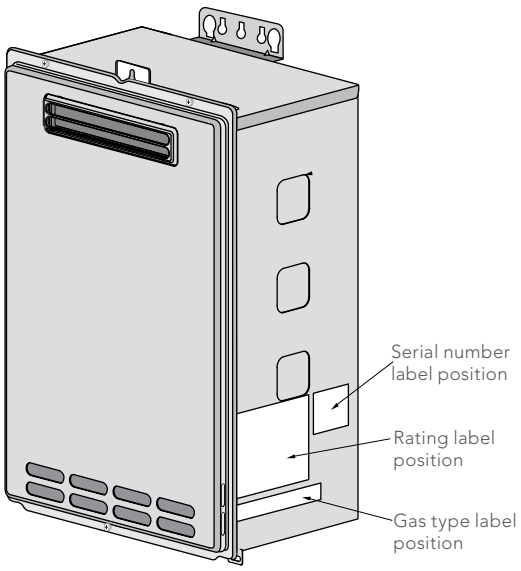
- For information relating to burner test point pressures and injector sizes refer to the rating plate located on the right hand side of the cabinet for each model (please refer to the diagram at the bottom of this page showing the locations of the labels on the water heater).
- For information relating to overall dimensions and connection points refer to diagrams on pages 6 & 7.
- Before installing in areas over 1500 m above sea level, contact the manufacturer for instructions.



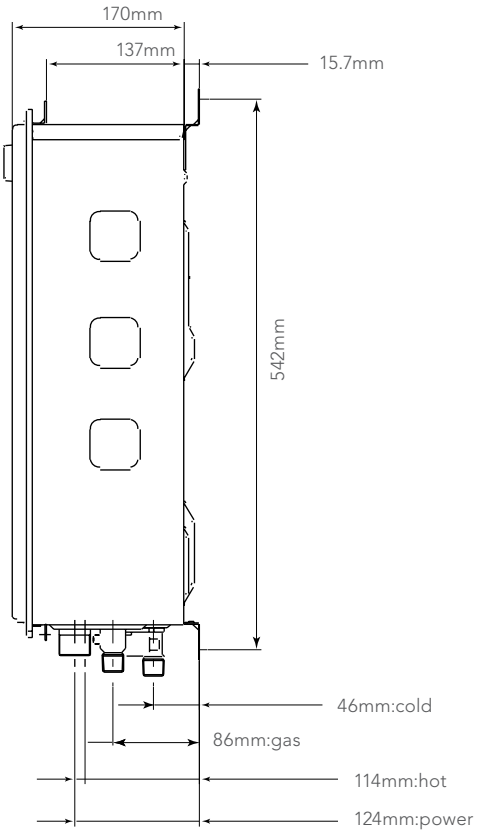
- Total length to first tap or outlet is required to be a minimum of 3 metres from the outlet connection of the water heater (minimum 1 metre for 60°C and 70°C models).
- Pipe size is nominal 1/2" from hot water outlet to the first tap or outlet.

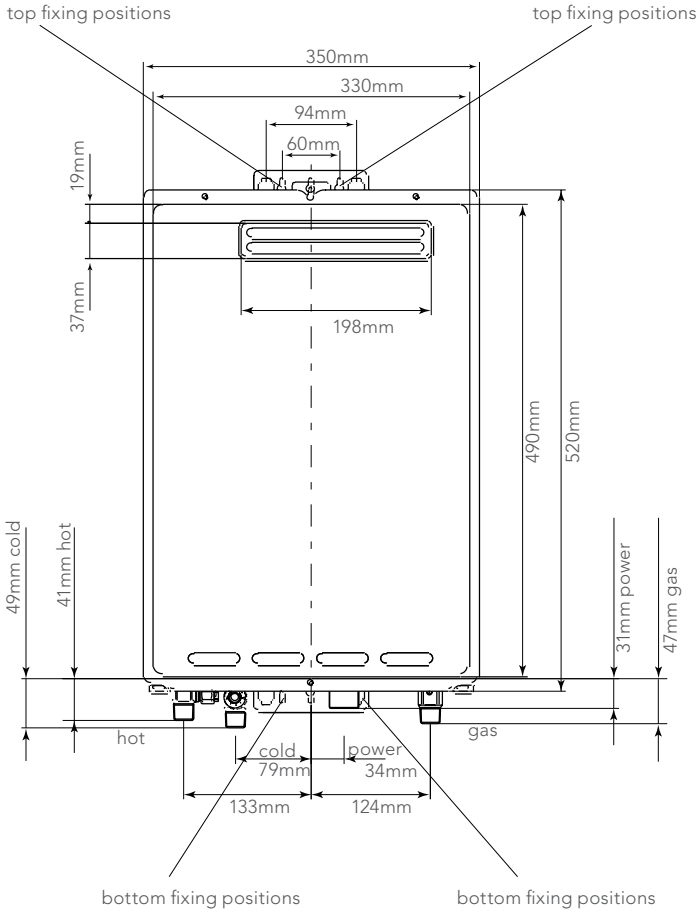
Accessories

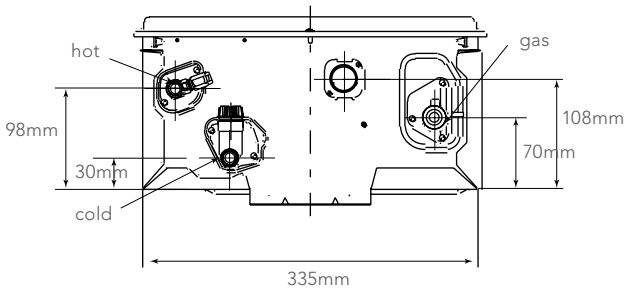
4 tapping screws are included with the water heater.



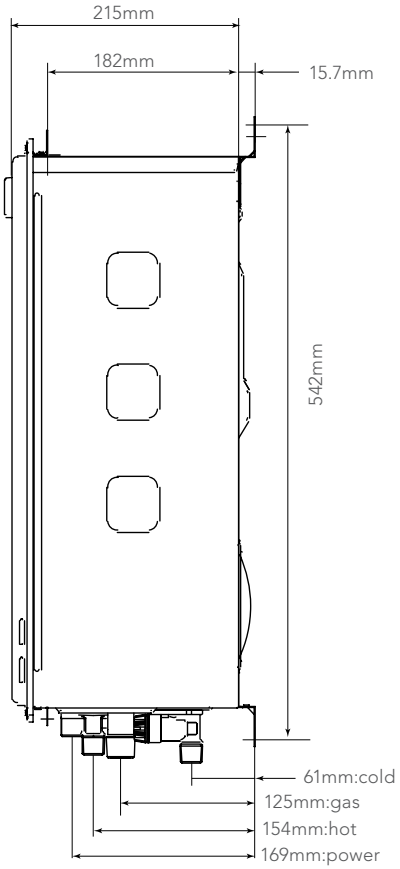
Exterior view –
KGC20BNA/KGC20BLA
KGC20KNA/KGC20KLA
KGC20SNA/KGC20SLA

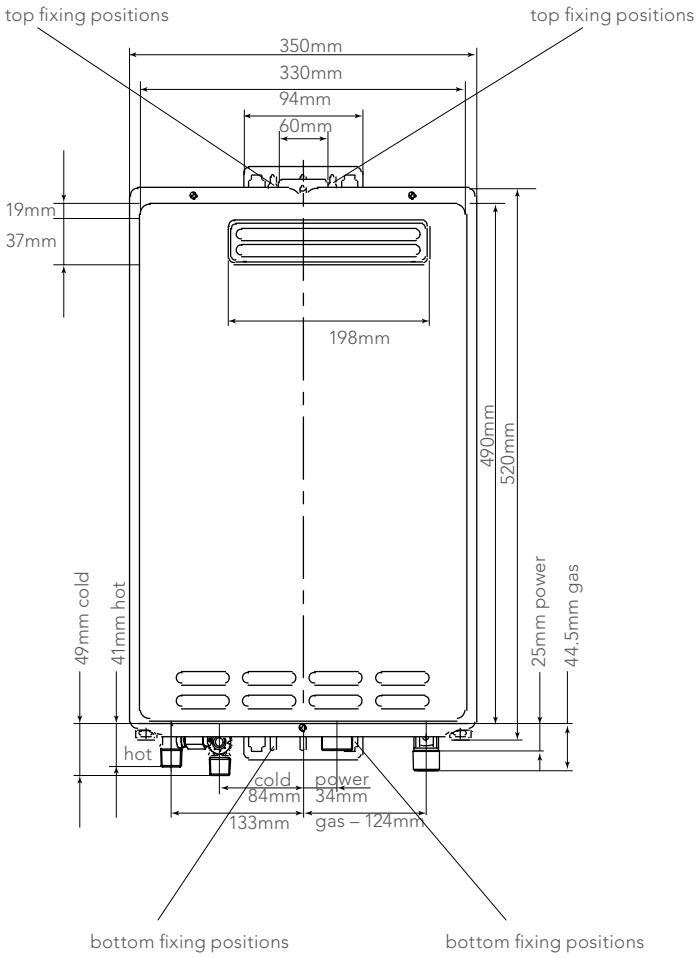


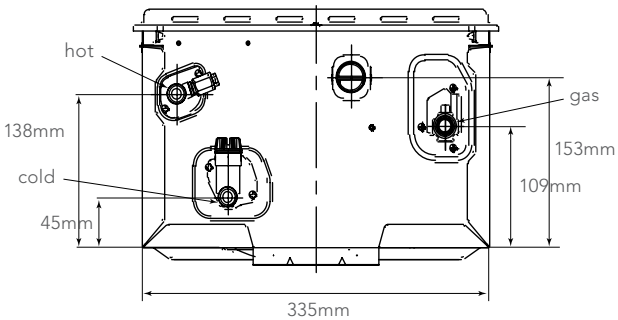




Exterior view – KGC26BNA/KGC26BLA KGC26KNA/KGC26KLA KGC26SNA/KGC26SLA







Installation

The water heater requires careful and correct installation to ensure safe and efficient operation. This manual must be followed exactly. Read the SAFETY GUIDELINES and the IMPORTANT sections at the beginning of this manual.

Confirm the water heater suitability

Check the gas type label and the rating plate for the correct gas type, gas pressure, water pressure and electrical rating for your application. Do not install this water heater if these requirements can't be met.

If this water heater is to be installed in a recess box, please refer to the installation manual supplied with the recess box for specific instructions regarding this type of installation.

⚠ caution

- The water heater must be installed outdoors only. Do not install the water heater indoors.
- This equipment is not suitable for pool or spa heating.
- Water hardness may affect the water heater. It may be damaged. It is important that the water heater is installed in water conditions that are suitable for its efficient, long term use.
- This is a water heating apparatus only and the final fitness of water delivered is dependent upon the quality of water supplied to this system.
- The connection, attachment, integration or general association of other equipment or parts not specified by the water heater which either directly or indirectly affect the operation or performance of this equipment – could void the warranty.
- Before making connections to the water heater, remove any transit protection designed to prevent dirt and debris from entering the water heater.
- The manifold pressure is preset at the factory. It is computer controlled and does not need adjustment.
- Occupants are to be advised of any inconveniences which could occur such as disconnection of services.
- Please follow the electrical earthing procedure outlined in AS3500.4 before cutting or uncoupling existing metallic pipework.
- To ensure the optimal performance of the water heater, it should be installed as close as practical to the most used hot water fixtures and have 20mm insulation covering the hot water piping. This will minimise heat loss, water usage and cost to the customer. Keep in mind though that a minimum distance of three metres is required between the outlet of the water heater and the first fixture (minimum one metre for 60°C and 70°C models).
- The water heater requires a fireproof back plate if installed on timber wall.

Selecting an installation location

Carefully read this section before selecting the installation location and installing the water heater. The installer must follow these precautions exactly.

⚠ caution

- Although the water heater is designed to operate with minimal noise, it is recommended that you do not install the water heater adjacent to bedrooms or other areas designed to be quiet.
- Locate your water heater close to a drain where leakage will not damage surrounding areas. As with any water heating appliance, the potential for leakage at some time during the life of the product does exist.
- The water heater shall be installed far away from any flammable or combustible materials including wood and cardboard. It must also have adequate ventilation to allow the proper combustion of the gas inside the heater to take place.

⚠ warning

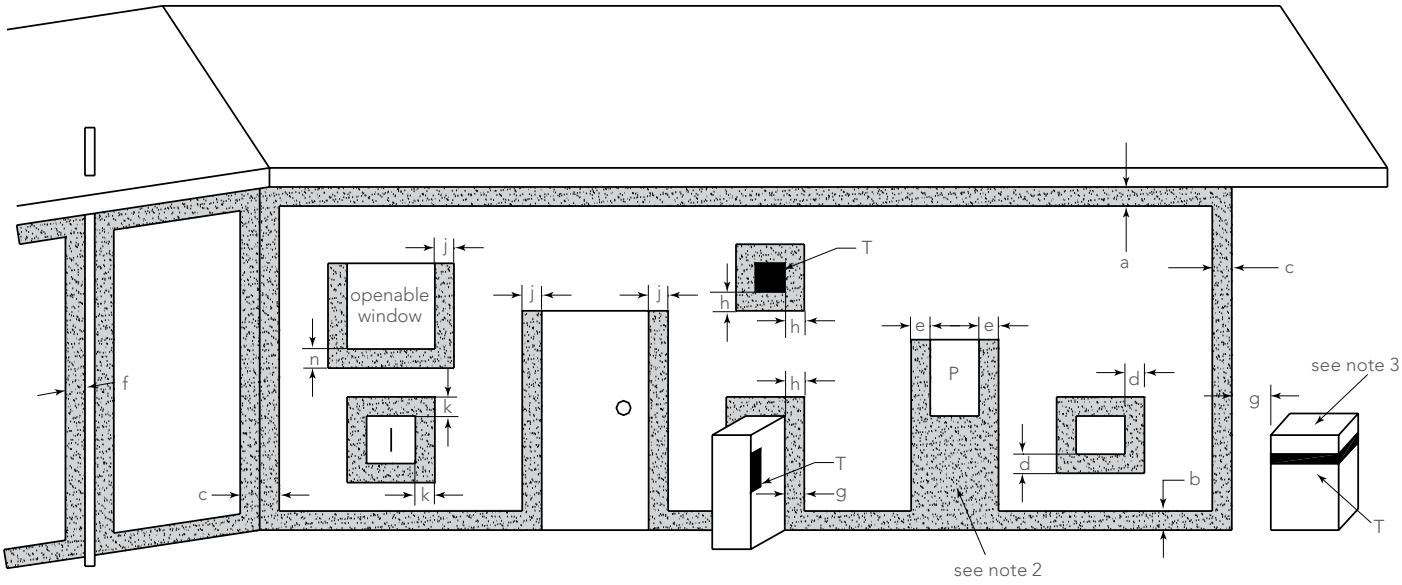
- **Ensure every care is taken to warn occupants of the building and the public of any injury that may occur from falling tools, open trenches, water connections or any other general hazard.**
- **Make sure the water heater will have enough combustion air and proper ventilation.**
- **Keep the area around the water heater clean. Particles may clog the air vent, reduce fan function, or cause improper combustion.**
- **Locate the water heater to allow for easy access for service and maintenance. Install the water heater so that it can be connected or removed easily.**
- **Do not locate your water heater in a pit or any location where gas and water can accumulate.**

- Check the proximity of gas and electrical lines so as not to create a hazard and avoid access problems for other services.
- It must be located in accordance with the requirements of AS5601 and have sufficient clearances from eaves, windows, vents etc. – see the diagram on p.9.
- Exemption from Prescribed Statutory Requirement: AS5601-2000 Clause 5.13.6.5, This relates to the physical separation distance specification where multiple appliances are employed. That equates to a minimum 150mm horizontal flue separation distance allowing appliances to be placed side by side in the same vertical plane
- Most load bearing walls such as brick, brick/veneer, weatherboard and stud-frames are suitable locations.
- Securely fasten the water heater to the wall with a fixing solution suitable to the type of material the wall is made from. A minimum of two screws or bolts at the top and two screws or bolts at the bottom must be used.

Note: Refer to pages 6 & 7 for fixing positions.

Clearances for outdoor heater locations – AS5601

This diagram and reference table has been taken from the AS/NZS 5601 standard regarding gas installations. Any references on this page to clauses or appendix figures are referring directly to this standard.



T – Flue terminal
I – Mechanical air inlet
M – Gas meter
P – Electricity meter or fuse box
Shading indicates prohibited areas for flue terminals

Reference	Item	Minimum clearances (mm)
a	Below eaves, balconies and other projections:	
	• appliances up to 50MJ/h input	200
	• appliances over 50MJ/h input	300
b	From the ground above a balcony surface*	300
c	From a return wall or external corner*	300
d	From a gas meter (M) (see 4.7.11 for vent terminal location of regulator)	1000
e	From an electricity meter or fuse box (P)	500
f	From a drain or soil pipe	75
g	Horizontally from any building structure* or obstruction facing a terminal	500
h	From any other flue terminal, cowl or combustion air intake	300
j	Horizontally from an openable window, door, non-mechanical air inlet or any other opening into a building with the exception of sub-floor ventilation	
	• Appliances up to 150 MJ/h input	300
	• Appliances over 150 MJ/h input up to 200 MJ/h input	500
	• Appliances over 200 MJ/h input	1500
	• All fan-assisted flue appliances in the direction of discharge	1500
k	From a mechanical air inlet, including a spa blower	1000
n	Vertically below an openable window, non-mechanical air outlet or any other opening into a building with the exception of sub-floor ventilation	
	• Space heaters up to 50 MJ/h input	150
	• Other appliances up to 150 MJ/h input	500
	• Appliances over 50 MJ/h input up to 150 MJ/h input	1500
	• Appliances over 150 MJ/h input	1500

*unless appliance is certified for closer installation.

NOTES:

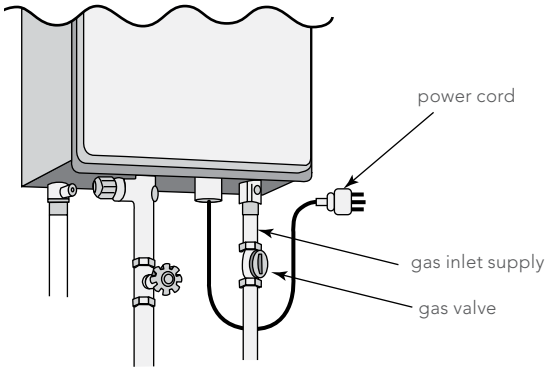
1. All distances are measured to the nearest part of the terminal.
2. Prohibited area below electricity meter or fuse box extends to ground level.
3. See clause 15.3.6.6 for restrictions on a flue terminal under a covered area.
4. See Appendix J, figures J2(a) and J3(a) for clearances required from a flue terminal to an LP gas cylinder. A flue terminal is considered to be a source of ignition.
5. For appliances not addressed above, acceptance should be obtained from the technical regulator.

Exemption from prescribed statuatory requirements referred to above has been granted to allow multiple series of the water heaters to be positioned side by side.

Gas connection

caution

1. Turn off the electrical supply to the water heater and manual gas valve located on the outside of the water heater before beginning gas connection.
2. Confirm the position of the gas inlet. Do not connect any water lines to the gas inlet. It may be critically damaged.



Sizing and connection

Check the gas type label to make sure that the water heater was built for the type of gas you will be using, and that the gas inlet pressure is within the appropriate range. (Please refer to page 5)

1. Gas pressure below this specified range for the water heater and/or insufficient gas volume will adversely affect performance.
2. Inlet gas pressure must not exceed the above maximum values; gas pressure above the specified range will cause dangerous operating conditions and damage to the water heater.
3. Until testing of the main gas line supply pressure is completed, ensure the gas line to the water heater is disconnected to avoid any damage to the water heater.

warning

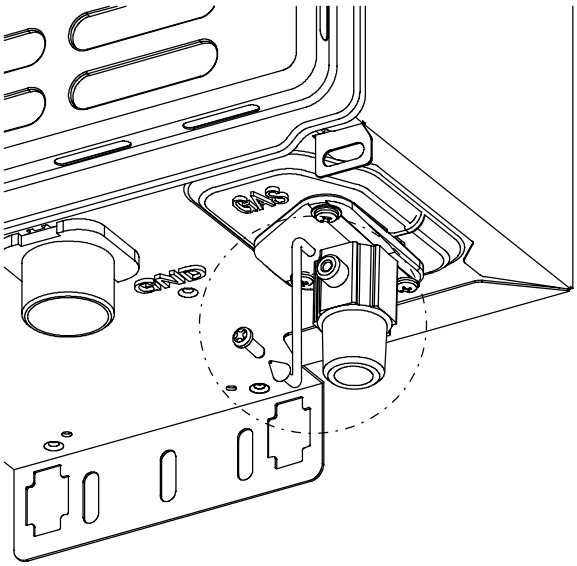
Conversion of this water heater from natural gas to propane or propane to natural gas cannot be done in the field. Contact your local retailer or distributor to get the correct water heater for your gas type.

- Size the gas piping according to AS5601 installation code for the correct pipe sizing for the water heater.
- Always use approved connectors to connect the water heater to the gas line. The service technician should purge the gas line of any debris before connecting to the water heater.
- Install a manual gas shut-off valve between the water heater and the gas supply line.
- The regulator is preset at the factory. It is computer controlled and is not to be adjusted by any person other than a qualified Service Provider.
- When the gas connections are completed, it is necessary to perform a gas leak test either by applying soapy water to all gas fittings and observing for bubbles or by using a gas leak detection device.

Measuring inlet gas pressure and testing gas leakage

The inlet gas pressure to the water heater should be checked and leak tested before operating for the first time. **This is only to be done by a licensed professional.**

1. Shut off the manual gas valve on the supply gas line.
2. Open a faucet. The water heater should turn on and the gas in the gas pipe line should purge. Leave the faucet on to keep the water heater running until it shuts down due to lack of gas supply. Then shut the faucet off.
3. Remove the screw for the pressure port located on the gas inlet of the water heater shown in the diagram below.
4. Connect the manometer to the pressure port.
5. Re-open the manual gas valve. Check to see that there are no gas leaks.
6. Open some of the fixtures that use the highest flow rate to turn on the water heater.
7. Check the inlet gas pressure. When the water heater is on a maximum burn, the inlet gas pressure within must be within the appropriate range. (Please refer to page 5)

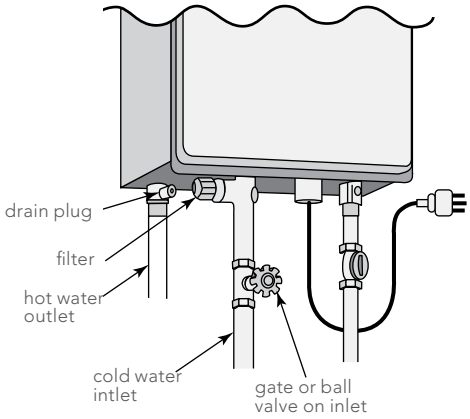


This water heater and its individual shut-off valve must be isolated from the gas supply piping system by unplugging the water heater and turning off the main gas valve during any pressure testing of the gas supply piping system at test pressures above 3kPa.

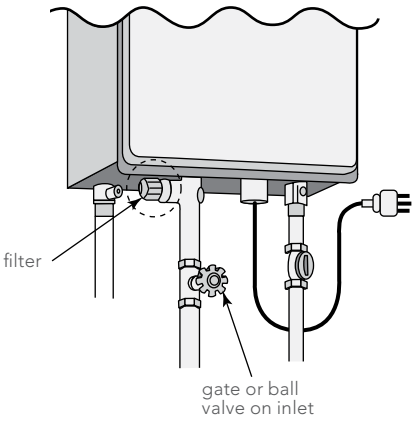
Water connection

warning

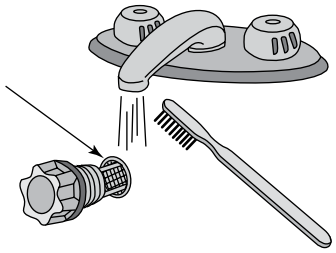
Do not reverse the hot outlet and cold supply line connections to the water heater as this will cause your heater to operate improperly.



- All pipes, pipe fittings, valves and other components, including soldering materials, must be suitable for potable water systems.
- A manual shut off valve must be installed on the cold water inlet to the water heater between the main water supply line and the water heater.
- Only a gate valve or a ball valve is to be used on the cold water supply.
- No stop taps or check valves are to be used as this will void the warranty and damage the water heater.
- Check that the cold water pressure is sufficient for the water heater. If it is above 1000kPa an approved pressure limiting valve must be fitted to the installation.
- Before installing the water heater, flush the water line to remove all debris, and after installation is complete, purge the air from the line. Failure to do so may cause damage to the water heater.
- There is a wire mesh filter on the water heater cold inlet to prevent debris from entering the water heater. Clean the filter after initial installation to ensure it has not been blocked.



Remove the filter by turning it counterclockwise. Clean under running water with an old toothbrush then replace.



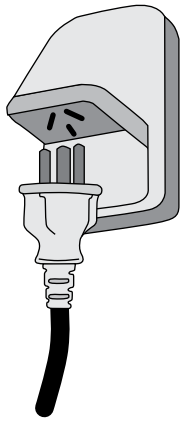
1. Turn off the water inlet supply valve.
2. Open a hot water tap to release the line pressure.

NOTE: This filter is designed to be cleaned as part of regular maintenance.

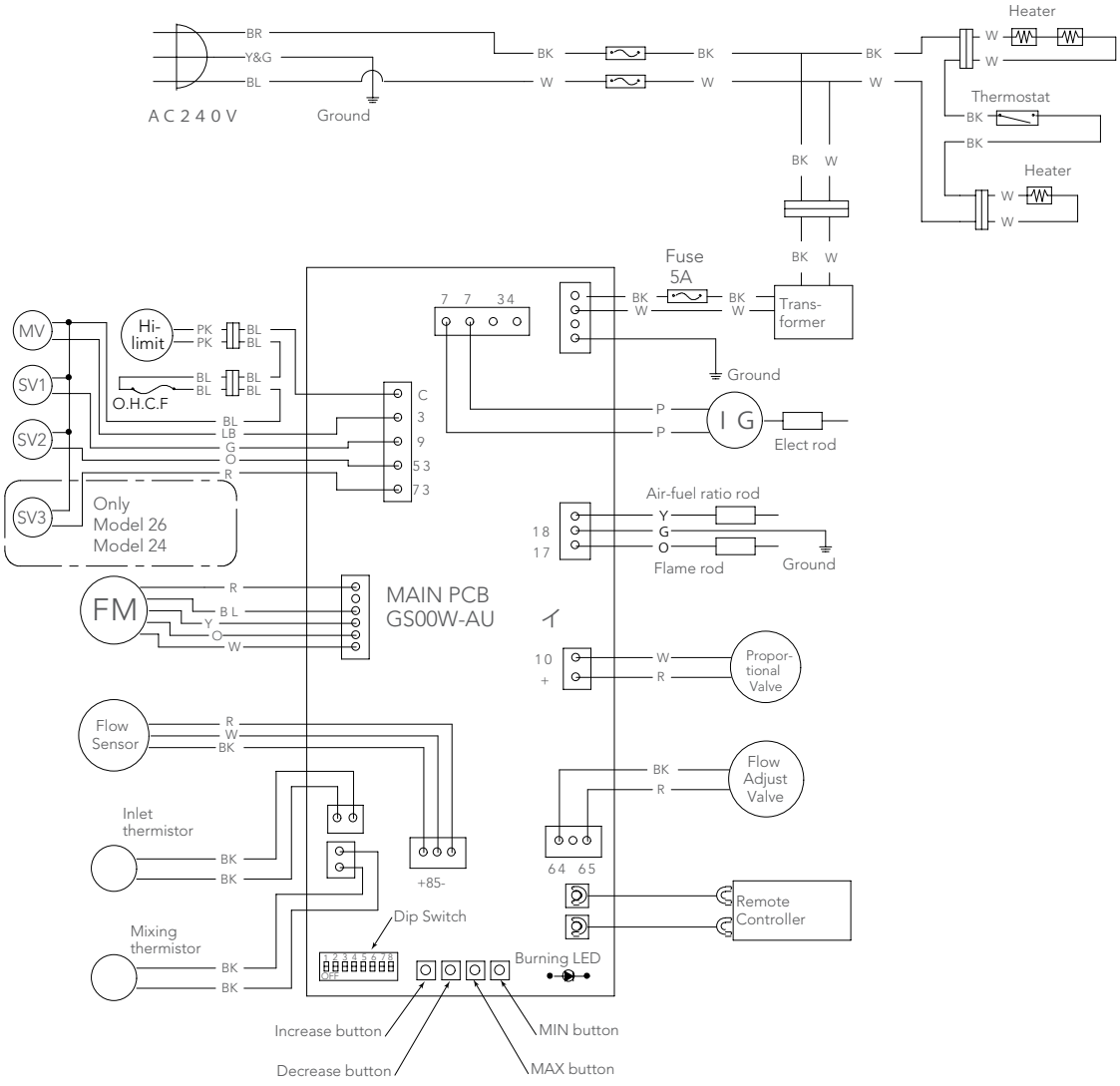
Electrical connection

1. The water heater must be electrically grounded. Please ensure that the earth on the outlet that the supply cord connects to is wired correctly. If in doubt check the continuity of the earth at the outlet to the earth stake on the premises.
2. The water heater requires an AC 240V 50Hz electrical power supply and draws a current of 0.8A.
3. The water heater must be connected to a weather-proof power outlet. This outlet shall be no more than 1 meter from the base of the water heater for easy access.
4. Means for disconnection must be incorporated in the fixed wiring in accordance with the wiring rules.
5. The insulation of the fixed wiring must be protected by insulating sleeving having an appropriate temperature rating.
6. If the supply cord is to be replaced, this must be done by a service technician, electrician or similarly qualified person in accordance with the wiring rules.

Weather-proof power outlet



Wiring diagram



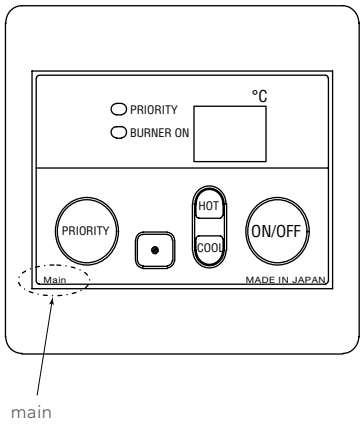
Remote controller (optional 60°C models only)

The water heater can be installed with a remote controller. Each remote controller has two functions which can adjust the set temperature and indicate the error code on the remote controller.

- The set temperature can be adjusted only when the priority lamp on the remote controller is lit. Press the priority button on the controller to set it to priority. Make sure there is no water flowing through the water heater when you do this.
- If there is a problem with the installation or water heater, the remote controller will display a numerical error code.

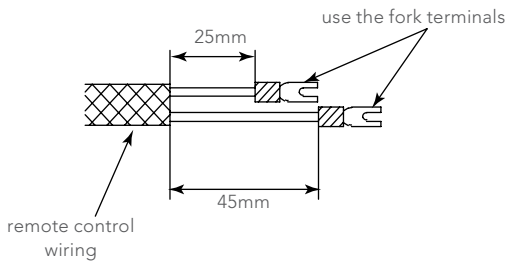
Main remote controller model KGCMRCA

- KGCMRCA must be installed inside as it is NOT water resistant.
- Allows the output temperature from the water heater to be adjusted within the range of 37°C to 55°C.
- The temperature options are:
  37°C, 38°C, 39°C, 40°C, 41°C, 42°C, 43°C, 44°C, 45°C, 46°C, 47°C, 50°C, 55°C.
- When "BURNER ON" lamp is lit, the set temperature can not be adjusted to 55°C. If you wish to set it to 55°C, you should close the hot water tap.
- Where a tempering valve is installed, the temperature will not be able to rise beyond the setting of the tempering valve e.g. 50°C.

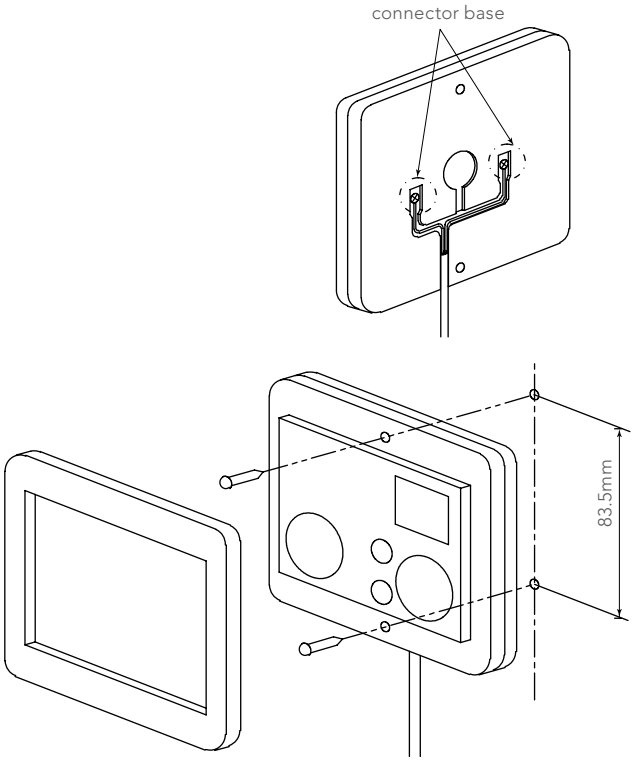


Remote controller installation

1. Crimp the fork terminals to the wires. Minimum 18AWG wire (No polarity). Maximum 100m long



2. Attach the fork terminal to the connector base of the backside unit with two screws tight.
3. Install the wiring downward through the cable trench and out the bottom of the connector base.
4. Attach the remote control on the wall with the two included screws. (If you need to attach the remote control to gyprock, you should use the anchor plug.)



warning

- **The remote controller must be installed inside and in an area that isn't wet or damp as it is NOT water resistant. This includes bathrooms and other potentially wet areas.**
- **DO NOT position the remote controls in the vicinity of chemicals.**
- **DO NOT position the remote controls over a cooker, grill or toaster.**
- **DO NOT position the remote controls where materials may spill onto them.**
- **Please note if the controls are to be fitted to a metal surface an insulation plate should be provided behind the mounting position.**

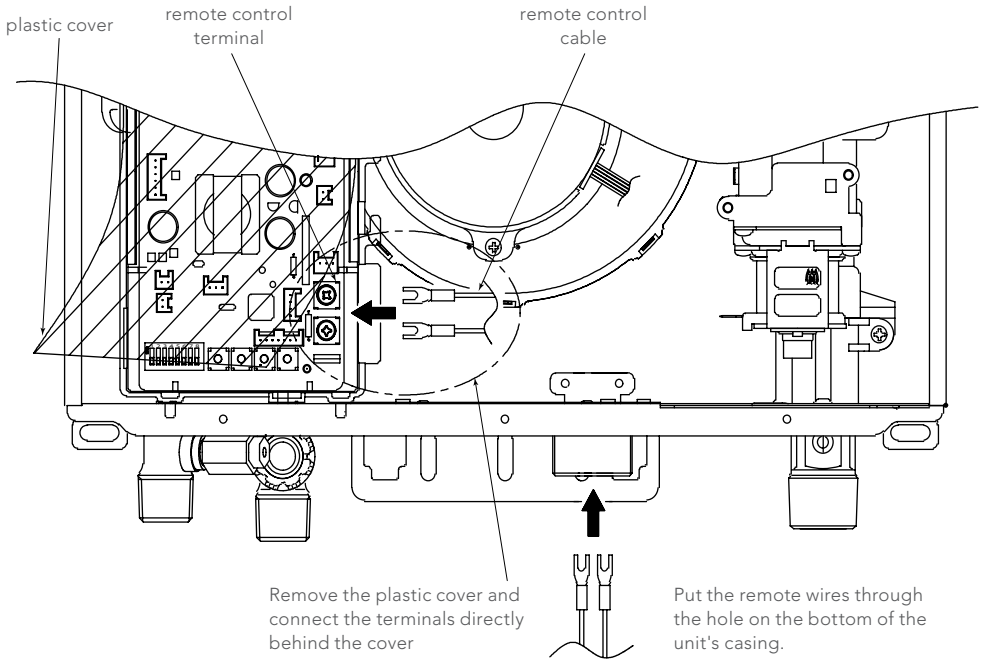
Connection of remote controller wiring to the water heater

1. Turn off the power supply to the water heater.
2. Remove the front cover from the water heater. There are 3 screws on the front cover.
3. Put the remote wires through the hole on the bottom of the water heater's casing.
4. Remove the plastic cover and connect remote control wires to remote terminals directly. (There is no polarity in the terminations).

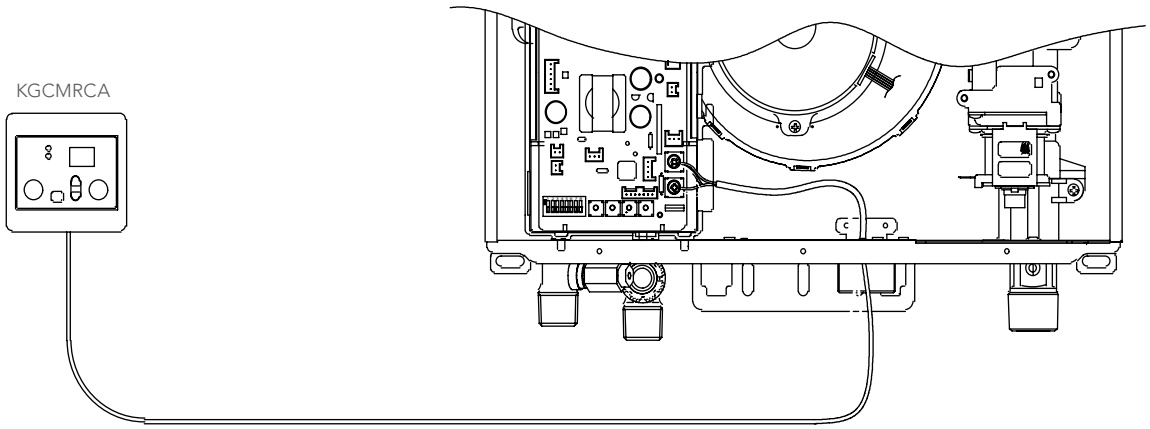
caution

DO NOT jump or short-circuit wires. Computer will be damaged.

5. Replace the plastic cover and the front cover and connect the power plug.


plastic cover
remote control terminal
remote control cable
Remove the plastic cover and connect the terminals directly behind the cover
Put the remote wires through the hole on the bottom of the unit's casing.

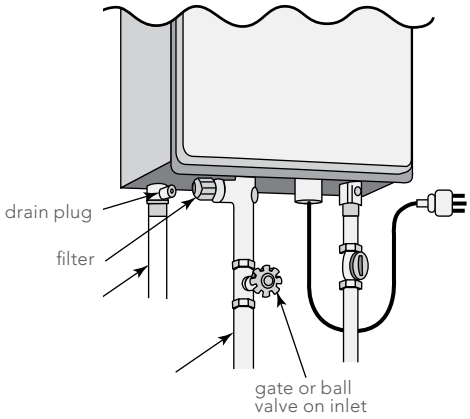
Remote control cable connections



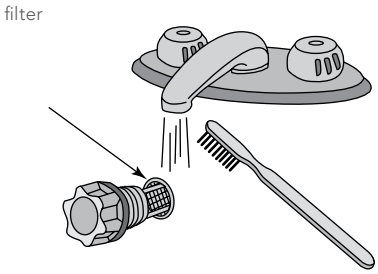
typical cable layout

Commissioning instructions

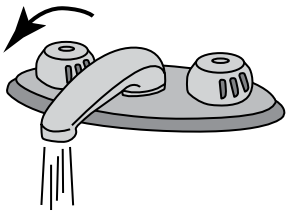
These steps are to be followed after the installation of the gas continuous flow hot water system to ensure its safety and performance. If the hot water system cannot be setup to perform correctly as specified in this manual, please call the service centre (number located in the warranty section of this manual) for further instructions.



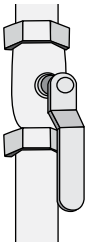
1. Remove and clean the filter located on the cold water inlet to the water heater (refer to page 11 of this manual).



2. Open all the hot taps and fixtures in the house.



3. Open the cold water isolation valve fully at the inlet to the water heater
4. Check all pipe work for leaks and stop the leaks as necessary
5. Once all the air has been forced out of the system and water is flowing freely from every hot tap or fixture, close all hot taps and fixtures
6. Open the gas isolation valve fully by hand at the inlet to the water heater

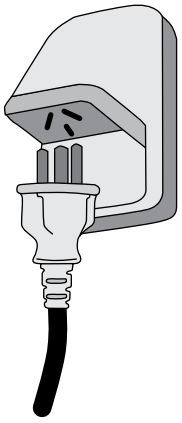


7. Check the gas pipe work for leaks and stop the leaks as necessary

caution

If there is a gas leak that cannot be stopped, do not try to start the water heater. Do not touch any electrical switches, use a mobile phone or any other ignition source. Close the main gas isolating valve to the premises and walk a safe distance away. Call the gas supplier and follow the gas supplier's instructions.

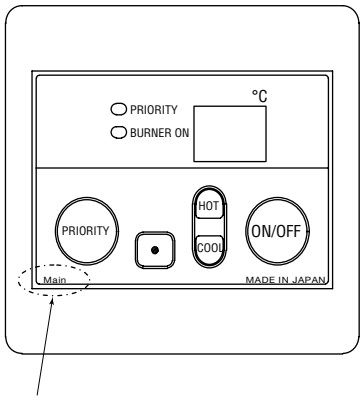
8. Check the inlet gas pressure (refer page 10 of this manual).
9. Plug the power cord into the socket outlet and switch on the electrical supply.



10. Open a hot water tap or fixture.
    - If there is sufficient water flow the water heater should start up automatically
11. Check each hot water tap or fixture to ensure that there is sufficient flow to operate the water heater (minimum 3 litres per minute).
12. Check the temperature of the hot water at each hot tap or fixture intended primarily for personal hygiene to ensure the temperature is not higher than 50°C.

Commissioning instructions (continued)

13. If a remote controller has been installed, check that the controller operates correctly (refer page 13 of this manual).



The gas continuous flow hot water system should now be operating correctly.

Now that commissioning has been completed and the gas continuous flow hot water system has been set up to operate correctly, select the correct model number of the water heater on page 5 of the user manual. Fill out your details, the serial number, installation date and include any important notes to the customer. The user manual is then to be handed to the customer or left in a suitable location on the premises. If the customer is available they are to be instructed on the safe and correct operating of the water heater and any auxiliary equipment.

If the hot water system isn't going to be used for a long time and needs to be turned off after commissioning, follow these instructions:

- Switch off the electrical supply at the power outlet that the water heater is plugged into
- Close the gas isolation valve located on the inlet to the water heater
- Close the cold water isolation valve located on the inlet to the water heater

Note: If there is a risk of freezing conditions, do not switch off power to the water heater unless it is drained of water first. Please see the section on freeze prevention on page 9 of the user manual for more information.

Troubleshooting

Temperature and amount of hot water	
Problem	Possible solutions
It takes a long time for hot water to reach the fixtures.	The time it takes to deliver hot water from the water heater to your fixtures depends on the length of piping between the two. The longer the distance or the bigger the pipes, the longer it will take to get hot water.
The water is not hot enough	If a tempering valve is installed, is it set too low or malfunctioning?
	Are the cold water and hot water lines cross connected?
	Is the gas supply valve fully open?
	Is the gas line sized properly?
	Is the gas supply pressure enough?
	Is the set temperature set too low?
	Is the combustible air inlet or exhaust outlet blocked?
The water is too hot	Is the set temperature set too high?
The hot water is not available when a fixture is opened.	Does the water heater have a 240V 50Hz power supply available?
	If you are using the remote controller, is the power button turned on?
	Is the gas supply valve fully open?
	Is the water supply valve fully open?
	Is the filter on cold water inlet clean?
	Is the hot water fixture sufficiently open to draw at least 3.0l/min through the water heater?
	Is the water heater frozen?
	Is there gas available to the water heater and (if applicable) does the gas storage tank have enough gas in it?
The hot water gets cold and stays cold	Is the flow rate enough to keep the water heater running?
	Is the gas supply valve fully open?
	Is the filter on the cold water inlet clean?
	Are the fixtures clean of debris and obstructions?
Fluctuation in hot water temperature.	Is the filter on the cold water inlet clean?
	Is the gas line sized properly?
	Is the supply gas pressure enough?
	Are the cold water and hot water lines cross connected?

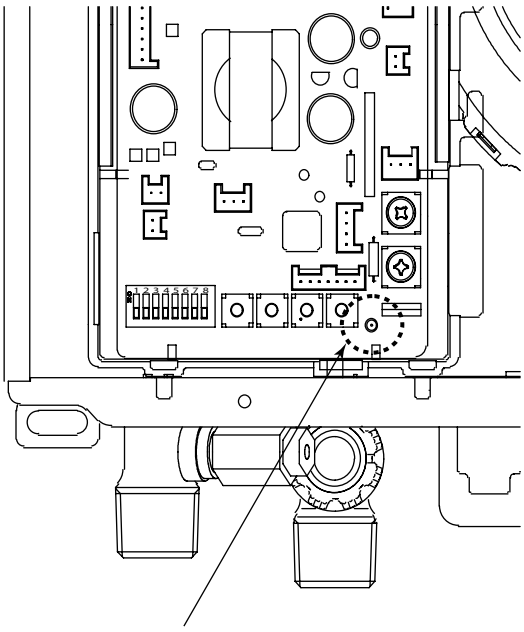
Water heater	
Problem	Possible solutions
Burner does not ignite when water goes through the water heater.	Is the flow rate over 3.0l/min?
	Is there a 240V 50Hz power supply available to the water heater?
	Are the cold water and hot water lines cross connected or reversed?
	If you use the remote controller, is the power button turned on?
The fan motor is still spinning after operation has stopped.	This is normal. After operation has stopped, the fan motor keeps running for 15 – 75 seconds in order to re-ignite quickly, as well as push all exhaust gas out of the flue.
White vapour clouds are coming from the hot air outlet of the water heater	It is normal to see water vapour clouds or steam coming from the hot air outlet of the water heater especially during cold and wet days.

Remote controller (optional)	
Problem	Possible solutions
Remote controller does not display anything when the power button is turned on.	Press the ON/OFF button.
	If the lamp does not light:
	Make sure the water heater has power supply.
	Make sure the connection to the water heater is correct.
An ERROR code is displayed	Call a service technician.
Remote controller can not change the set temperature.	Is priority lamp lit? If it is not, press the priority button after closing all hot water taps.

PCB error codes

The water heater is self diagnostic for safety and convenience when troubleshooting.

If there is a problem with the installation or the water heater an LED will blink on the PCB. Consult the following chart for the cause of each error signal.



The PCB is located at the bottom left-hand side of the cabinet and the error codes can be read from the LED on the PCB.

Error Codes on the PCB	
The LED on the PCB	Symptom
LED light blinks once	Incorrect dipswitch setting (gas)
	Proportional valve/computer
LED light blinks twice	Output thermistor
	Inlet thermistor
	Air-fuel ratio rod failure
LED light blinks three times	Ignition failure
	Flame loss
	Abnormal main gas valve or gas solenoid valve
	False flame detection
	Imperfect combustion
LED light blinks four times	Inlet water supply pressure or flow abnormal
LED light blinks five times	Remote controller KGCMRCA fault

Notes

Notes

Notes

Electrolux Warranty

FOR SALES IN AUSTRALIA AND NEW ZEALAND
APPLIANCE: HOT WATER SYSTEMS

This document sets out the terms and conditions of the product warranties for Electrolux Appliances. It is an important document. Please keep it with your proof of purchase documents in a safe place for future reference should you require service for your Appliance.

1. In this warranty
   (a) 'acceptable quality' as referred to in clause 10 of this warranty has the same meaning referred to in the ACL;
   (b) 'ACL' means Trade Practices Amendment (Australian Consumer Law) Act (No.2) 2010;
   (c) 'Appliance' means any Electrolux product purchased by you accompanied by this document;
   (d) 'ASC' means Electrolux' authorised serviced centres;
   (e) 'Electrolux' means Electrolux Home Products Pty Ltd of 163 O'Riordan Street, Mascot, NSW 2020, ABN 51 004 762 341 in respect of Appliances purchased in Australia and Electrolux (NZ) Limited of 3-5 Niall Burgess Road, Mount Wellington, in respect of Appliances purchased in New Zealand;
   (f) 'major failure' as referred to in clause 10 of this warranty has the same meaning referred to in the ACL and includes a situation when an Appliance cannot be repaired or it is uneconomic for Electrolux, at its discretion, to repair an Appliance during the Warranty Period;
   (g) 'Warranty Period' means:
      (i) where the Appliance is used for personal, domestic or household use (i.e. normal single family use) as set out in the instruction manual, the Appliance is warranted against manufacturing defects in Australia and in New Zealand for the period of 1 year, following the date of original purchase of the Appliance. Specific components are warranted against manufacturing defects in Australia for the periods listed below if there is evidence provided to Electrolux that the Appliance was installed by a licensed plumber; and in New Zealand if there is evidence that the Appliance was installed according to the Electrolux installation guidelines which can be inspected on the Kelvinator website;
         • Hot water tank cylinders - parts 5 years , labour 3 years
         • Continuous Gas
           - Heat Exchanger – parts 10 years, labour 3 years
           - all others components - parts 3 years, labour 3 years
         • Heat Pump Refrigerant Sealed System - 2 years parts and labour
         • Solar Collectors - parts 5 years, labour 3 years, 1 year for all other parts (mounting and connection sets)
      (ii) where the Appliance is used for commercial purposes (including being used to directly assist a business or where the Appliance is used in a multi-family communal or share type environment), the Appliance will then be warranted against manufacturing defects in Australia for 0 years and in New Zealand for 0 years, following the date of original purchase of the Appliance.
   (h) 'you' means the purchaser of the Appliance not having purchased the Appliance for re-sale, and 'your' has a corresponding meaning.
2. This warranty only applies to Appliances purchased and used in Australia or New Zealand and is in addition to (and does not exclude, restrict, or modify in any way) any non-excludable statutory warranties in Australia or New Zealand.
3. During the Warranty Period Electrolux or its ASC will, at no extra charge if your Appliance is readily accessible for service, without special equipment and subject to these terms and conditions, repair or replace any parts which it considers to be defective. Electrolux or its ASC may use remanufactured parts to repair your Appliance. You agree that any replaced Appliances or parts become the property of Electrolux. This warranty does not apply to light globes, batteries, filters or similar perishable parts.
4. Parts and Appliances not supplied by Electrolux are not covered by this warranty.
5. You will bear the cost of transportation, travel and delivery of the Appliance to and from Electrolux or its ASC. If you reside outside of the service area, you will bear the cost of:
   (a) travel of an authorised representative;
   (b) transportation and delivery of the Appliance to and from Electrolux or its ASC,

   In all instances, unless the Appliance is transported by Electrolux or an Electrolux authorised representative, the Appliance is transported at the owner's cost and risk while in transit to and from Electrolux or its ASC.
6. Proof of purchase is required before you can make a claim under this warranty.
7. You may not make a claim under this warranty unless the defect claimed is due to faulty or defective parts or workmanship. Electrolux is not liable in the following situations (which are not exhaustive):
   (a) the Appliance is damaged by:
      (i) accident
      (ii) misuse or abuse, including failure to properly maintain or service
      (iii) normal wear and tear
      (iv) power surges, electrical storm damage, excessive water pressure, excessive inlet water temperature or incorrect power supply
      (v) incomplete or improper installation
      (vi) incorrect, improper or inappropriate operation
      (vii) insect or vermin infestation
      (viii) failure to comply with any additional instructions supplied with the Appliance;
      (ix) quality of water that is not in accordance with the "Water Quality" guidelines in the installation instructions;
   (b) the Appliance is modified without authority from Electrolux in writing;
   (c) the Appliance's serial number or warranty seal has been removed or defaced;
   (d) the Appliance was serviced or repaired by anyone other than Electrolux, an authorised repairer or ASC.
8. This warranty, the contract to which it relates and the relationship between you and Electrolux are governed by the law applicable where the Appliance was purchased. Where the Appliance was purchased in New Zealand for business purposes the Consumer Guarantee Act does not apply.
9. To the extent permitted by law, Electrolux excludes all warranties and liabilities (other than as contained in this document) including liability for any loss or damage whether direct or indirect arising from your purchase, use or non use of the Appliance.
10. For Appliances and services provided by Electrolux in Australia, the Appliances come with a guarantee that cannot be excluded under the ACL. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the Appliance repaired or replaced if the Appliance fails to be of acceptable quality and the failure does not amount to a major failure. The benefits to you given by this warranty are in addition to your other rights and remedies under a law in relation to the Appliances or services to which the warranty relates.
11. At all times during the Warranty Period, Electrolux shall, at its discretion, determine whether repair, replacement or refund will apply if an Appliance has a valid warranty claim applicable to it.
12. For Appliances and services provided by Electrolux in New Zealand, the Appliances come with a guarantee by Electrolux pursuant to the provisions of the Consumer Guarantees Act, the Sale of Goods Act and the Fair Trading Act.
13. To enquire about claiming under this warranty, please follow these steps:
   (a) carefully check the operating instructions, user manual and the terms of this warranty;
   (b) have the model and serial number of the Appliance available;
   (c) have the proof of purchase (eg an invoice) available;
   (d) telephone the numbers shown below.
14. You accept that if you make a warranty claim, Electrolux and its ASC may exchange information in relation to you to enable Electrolux to meet its obligations under this warranty.

Important Notice

Before calling for service, please ensure that the steps listed in point 13 above have been followed.

FOR SERVICE or to find the address of your nearest state service centre in Australia **PLEASE CALL 13 62 26** For the cost of a local call (Australia only)	**SERVICE AUSTRALIA** Electrolux ELECTROLUX HOME PRODUCTS www.electrolux.com.au	**FOR SPARE PARTS** or to find the address of your nearest state spare parts centre in Australia **PLEASE CALL 1300 666 019** For the cost of a local call (Australia only)

FOR SERVICE or to find the address of your nearest authorised service centre in New Zealand **FREE CALL 0800 10 66 10** (New Zealand only)	**SERVICE NEW ZEALAND** Electrolux ELECTROLUX HOME PRODUCTS www.electrolux.co.nz	**FOR SPARE PARTS** or to find the address of your nearest state spare parts centre in New Zealand **FREE CALL 0800 10 66 20** (New Zealand only)

If you'd like further information about Kelvinator appliances, please visit your retailer, phone or email our Customer Care team or visit our website.

telephone: 1300 363 640
fax: 1800 350 067
email: customercare@electrolux.com.au
web: www.kelvinator.com.au

Kelvinator. We are part of the Electrolux family.
Share more of our thinking at www.electrolux.com.au

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